

ABSTRACT

Described is a method where a seal ring is formed by stacking interconnected conductive layers along the perimeter of an integrated circuit (IC). The seal ring is formed continuously around the IC perimeter using a conductive chain with two distinct widths. Each section of distinct width forms a transmission having a distinct characteristic impedance. Unwanted signals may be coupled to the seal ring from signal bond pads or from internal circuitry. Because of the impedance mismatch between the different width sections of the seal ring transmission lines, only a portion of each signal is propagated through each seal ring discontinuity while the remainder is reflected. As the signal passes through multiple discontinuities in the seal ring, it is further attenuated, reducing propagation of unwanted signals. This is accomplished while preventing moisture intrusion into the IC.